

the well-known fact that great numbers of insects, injurious and otherwise, are constantly being destroyed by the action of parasitic Fungi, the mode of operation of which he describes very clearly, and he refers to various naturalists who entertained the notion that something might be done for the destruction of insects injurious to agriculture by favouring the propagation of these insidious enemies. The first who attempted to realize this idea appears to have been the Russian naturalist Metschnikoff, and on his being prevented by other work from continuing his researches in this direction M. Krassilstchik undertook to carry on the work. He notices the difficulties which stand in the way of the successful prosecution of this curious cultivation, and indicates, but only in general terms, how these were overcome, so that he is able to estimate that the quantity of spores of at all events one species, *Isaria destructor*, which is particularly destructive to *Cleonus punctiventris*, itself a special enemy of the beetle, necessary for the infection of 1 hectare (= about 2½ acres) will cost only 10 francs. The spores are spread over the fields either along with the manure or mixed with sand, and in experimental "sowings" of this kind very distinct epidemics of the parasites were produced, amounting in ten days or a fortnight to from 55 to 80 per cent. of the insects.

In Palæontology we find an important note by M. Dollo on the cranium of the Mosasauridæ, illustrated with several woodcuts of parts of the skull and with a large plate containing figures of the crania of *Mosasaurus* and *Hainosaurus*, and, further, an article by the same author on the signification of the pendent trochanter in Dinosaurs.

Of course in a notice such as this it is impossible either to enumerate all the articles contained in the volume or to give more than a passing reference to those which are mentioned, and with the exception of M. Krassilstchik's paper we have done little more than indicate the titles. Nevertheless we hope that we have said enough to show that the 'Bulletin Scientifique' in its new form promises to play an important part in the advancement of Natural History, and that the reader may expect to find throughout its pages much sound and useful information.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

March 20, 1889.—W. T. Blanford, LL.D., F.R.S.,
President, in the Chair.

The following communication was read:—

"Note on the Pelvis of *Ornithopsis*." By Prof. H. G. Seeley, F.R.S., F.G.S.

The remains preserved in Mr. Leeds's collection at Eyebury, and described by Mr. Hulke, are the largest and most perfect pelvic

bones of a Saurischian known in this country. An examination showed that the bones of the right and left sides were united in the median line almost throughout their length by a median suture, and that they formed a saddle-shaped surface internally from front to back. After giving a detailed description of the pubis and ischium, the Author stated that he was not aware that this type of pelvis had been previously observed. He noted that the antero-posterior concavity between the anterior symphysis of the pubic bones and the posterior symphysis of the ischia was a well-marked characteristic of Saurischian reptiles, but that it remained to be determined to what extent the median union of the pubic bones was developed in the group.

It was impossible to judge of the form of the ilium from the imperfect fragment preserved, but it did not make any recognizable approximation to the bone in those American genera which offered the closest resemblance of form to the pubis and ischium.

There were several minor differences of proportion between the bones from the Oxford Clay and those from the Wealden of the Isle of Wight, and the former differed in ways pointed out from *Morosaurus*, *Diplodocus*, and *Brontosaurus*, though there were resemblances.

April 3, 1889.—W. T. Blanford, LL.D., F.R.S.,
President, in the Chair.

The following communications were read:—

1. "The Basals of *Eugeniocrinidæ*." By F. A. Bather, Esq., B.A., F.G.S.

Although Professors Beyrich and v. Zittel had alluded to certain specimens of *Eugeniocrinus* as proving, by the course of the axial canals, that in this genus the basals had passed up into the radials, yet the two chief authorities who subsequently discussed the subject practically ignored this argument. M. de Loriol contented himself with denying any trace of basals, while Dr. P. H. Carpenter maintained that the top stem-joint represented a fused basal ring. In a previous paper the Author had argued in favour of Prof. v. Zittel's view without convincing Dr. Carpenter of its correctness. Such scepticism was, no doubt, warranted by the lack of detailed description and of figures. The object of the present note was to set the matter at rest by describing and figuring certain dorsal cups of *Eug. caryophyllatus* kindly lent to the Author by Prof. von Zittel.

Owing to the mode of fossilization the canal-system is plainly seen. The axial canal passes up into the radial circle and gradually widens; at a short distance below the floor of the calyceal cavity it gives off five interradial branches; these soon bifurcate, and the adjacent radial branches converge. Before they meet, each radial branch gives off a very short branch; this connects the radial branch with the ring-canal that contained the interradial and intraradial commissures.

The evidence of all other crinoids that have these canals shows that the basals always contain the interradiial branches. And in *Eugeniocrinus*, since the interradiial branches have their origin in the middle of the radials, the basals must have passed up in between the radials.

2. "On some Polyzoa from the Inferior Oolite of Shipton Gorge, Dorset." By E. A. Walford, Esq., F.G.S.

The Author referred to the little attention the Jurassic Polyzoa have received in England, a few scattered papers comprising the whole of the literature of the subject. This may be accounted for, in part, by the rare occurrence of conditions favourable to the preservation of the delicate features necessary for their true study, and in part, also, by the difficulties into which the classification has drifted.

The series dealt with has been collected from the Inferior Oolite, zone of *Ammonites Parkinsoni*, at Shipton Gorge, Dorset, and the number of forms from the single horizon and locality was stated to be equal to the whole of those described by Jules Haime from the Lias to the Kimmeridge Clay. Associated with the Polyzoa are *Crania Moorci* and sp., *Thecidea*, sp., *Rhynchonella senticosa*, *Terebratula Phillipsii*, *Ammonites Martinsii*, some Echinoderms, and a large series of sponges. The tranquil conditions prevailing during the deposition of the beds are indicated by the presence of many slender and arborescent forms of Polyzoa, and the little abrasion they have suffered, as well as by the numerous sponges.

The Author, in briefly reviewing the Cyclostomata, adopts the simple divisions of Mr. Waters, the Parallelata and Rectangulata, based upon the Hineksian system. The disregard of zoarial growth, in any great degree, as a means of classification, would lead to confusion under the present modes of grouping; neither, however, can any great constancy be found in the form of the zoœcia or in the shape of the aperture.

In the group *Stomatopora* six species are recognized, of which two are new. Amongst the *Proboscine* is a species described in that stage of growth as *Proboscina spatiosa*, which passes into both Tubuliporoid and Diastoporoid forms, and also in the latter phase throws off erect Entalophoroid branches. The Author has used the same specific name for each form, though describing them under different generic names. Considerable variation in size and shape of cell occurs in each stage. The *Idmonœa* are represented by two new species and two new varieties; *Bisidmonœa* by one form only. Though the latter has much the appearance of *Entalophora* the character of the ovicell is so definitely that of the associated *Idmonœa* as to decide its relationship, and it has also the cell-type of *Idmonœa*. In the group *Entalophora* d'Orbigny's Cretaceous species *Entalophora raripora* and *E. subgracilis* are quoted, the latter, however, under a varietal form. *E. anomala*, Manz., *E. richmondiensis*, Vine, and one new species, *E. magnipora*, complete the list so far.